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The Returns From Informal Venture Capital Investments: An Exploratory Study

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Despite the recent increase in research on informal venture capital there are many aspects of this market for which no information exists. One such issue is exits. This exploratory study is the first to address this issue. It is based on a survey of 38 active business angels in Finland who had made a total of 155 investments; 20 of these investors had made 49 exits. Two aspects are addressed. First, evidence is presented on investment performance and the timing and method of exit. Second, the paper explores differences between those investors with a successful track-record of exits and those with an unsuccessful track-record. Differences are identified in terms of motivations for investing, volume and sources of information on investment opportunities, prior relationship with investee businesses, perception of value-added and employment background. However, conclusions should only be regarded as suggestive in view of the small numbers involved.

I. INTRODUCTION

There is little dispute that the informal venture capital market represents the largest source of external equity finance available for small and medium-sized enterprises (SMEs) and is significantly larger than the professional venture capital market.¹ For example, Gaston (1989) suggests that in the USA professional venture capital funds make forty times fewer investments in SMEs than informal investors—or business angels as they are better known—and invest less than one-tenth of the amount invested by business angels. Estimates for the UK and Finland both suggest that the informal venture capital market is at least twice as large as the institutional venture capital market in terms of the amount invested (Harrison & Mason, 1993; Suomi & Lumme, 1994).

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Furthermore, business angels are the dominant source of finance at the formation and early growth stages of new venture development. Studies of the investment portfolios of business angels suggest that 70 to 80% of their investments are in seed, start-up and early stage businesses (Gaston, 1989; Harrison & Mason, 1992a; Landström, 1993; Mason & Harrison, 1994). Research into the financing of new high technology-based firms (NTBFs) in the USA also finds that "private investors exhibit a significantly higher propensity to invest at the seed and start-up stages than other investors.... In fact, private individuals provided the seed capital that launched the majority of NTBFs in the sample" (Freear & Wetzel, 1990, pp. 88–89). In similar vein, Roberts (1990, p. 84) has observed that "the great majority" of the initial financing of new technology enterprises through outside investors has been undertaken by business angels. Yet despite this evidence of the importance of the informal venture capital market as a source of early stage venture capital, the amount of research that has examined its characteristics and operation remains remarkably limited.

The pioneering studies of the informal venture capital market in the early and mid 1980s that were undertaken in the USA with funding from the US Small Business Administration (e.g. Wetzel, 1981; Wetzel and Seymour, 1981; Arum Associates, 1987, Gaston & Bell, 1986; 1988; Gaston, 1989) simply sought to "put boundaries on our ignorance" (Wetzel, 1986, p 131). International interest in the topic led to studies in Canada (e.g. Short & Riding, 1989; Riding et al, 1993), the UK (Mason & Harrison, 1994), and the Nordic countries (Landström, 1993; Lumme & Suomi, 1994). As a result, there is now a fairly good understanding of what might be called the "ABC of business angels"²—their investment activity, behaviour and characteristics. In addition, there have also been a number of policy-related studies which have been concerned primarily with initiatives to stimulate informal venture capital activity through the introduction of business angel networks (e.g. Mason & Harrison, 1995a; Harrison & Mason, 1996).

Thus, progress in informal venture capital research has primarily involved a "widening" of our understanding by addressing ABC-type issues in a variety of geographical contexts. This restricted focus has led to a call for a "deepening" of research. In their research agenda towards the year 2000, Freear & Wetzel (1992, p. 483) proposed that more attention should be given "to the need to develop explanatory and predictive theories for empirical testing." Some progress has been made in this direction, for example, by Landström (1992) who has examined the business angel-entrepreneur relationship in an agency theory context and by Fiet (1995) who has examined risk avoidance strategies of business angels and venture capitalists and how this relates to their use of networks of informants. Some new avenues of enquiry have also emerged. Examples include studies of the demand-side (e.g. Freear & Wetzel, 1990; Freear, Wetzel & Sohl, 1995), the decision-mak-

ing process (Mason & Harrison, 1996a; Mason & Rogers, 1996; 1997) and the post-investment relationship (e.g. Mason & Harrison, 1996b).

Nevertheless, there remain many aspects of the informal venture capital market for which no information exists and where Wetzel's call for research which puts boundaries on our ignorance remains valid and appropriate.³ One such issue concerns the performance of informal venture capital investments and the harvesting of such investments (Freear, Sohl & Wetzel, 1996). Although there is some evidence on the *expectations* of business angels, in terms of their exit horizon, method of exit, the rate of return and proportion of "winners" and "losers" (Wetzel, 1981; Tymes & Krasner, 1983; Mason & Harrison, 1994) there have been no studies of the *actual* returns achieved by business angels nor their *actual* timing and method of exit.

The purpose of this paper is to fill this significant void in our knowledge of the informal venture capital market by examining the exits made by a sample of Finnish business angels. The paper first looks at the aggregate pattern of exits and then explores differences between successful and unsuccessful investors.

II. METHODOLOGY

Business angels are extremely difficult to identify. They have a preference for anonymity, there are no directories of individual investors and no public records of their investment transactions (Wetzel, 1981; 1987). They may also be reluctant to respond to research surveys because of the private and personal nature of the subject matter and the fear of being identified and then deluged with investment proposals (Haar *et al*, 1988). The size and characteristics of the population of informal investors is therefore unknown, and probably unknowable (Wetzel, 1981). Because the population is not known, this means that it is not possible to test any sample of business angels for its representativeness.

The approach that was used in this study⁴ was based on evidence from a review of previous studies that the most effective method of both identifying business angels and obtaining a high response rate is by personal contact through "networking" (Mason & Harrison, 1994). Moreover, as investors tend to be linked by friendship and business networks, identification of an initial group of informal investor typically leads to an introduction to others. A list of 151 names was compiled following approaches to a business mentor organisation and to business professionals (e.g. venture capitalists, science park managers) plus referrals from the investors identified by these two sources. Contact with these individuals led to completed face-to-face interviews with 59 of them, comprising 38 active and 21 potential business angels. The active angels had made a total of 155 investments in unquoted companies and 20 investors had exited from 49 of them. It is these investors and these exits that are the subject of this paper.

A number of limitations to the study should be noted at the outset. The first, and most significant, limitation is that the exit information is not deal specific but is only investor specific. Second, the number of exits is relatively small. This reflects the inherent difficulties in identifying business angels, the small population of business angels that exist in a country the size of Finland (5 million population) and the underdeveloped nature of its equity culture. Indeed a formal venture capital industry has only been in existence in Finland since the late 1980s. Thus, the concept of making informal venture capital investments is relatively new. The small number of exits prevents any statistical analysis from being undertaken. Third, the sample is likely to be biased towards the more active business angels in Finland. As such, these investors may have a high average number of exits. Fourth, there may be a bias in favour of investors with a strong interest in investing in technology businesses because of the networking sources used to identify business angels.

III. ACTIVE BUSINESS ANGELS IN FINLAND: AN OVERVIEW

Personal Characteristics

Based on this sample (Suomi & Lumme, 1994), Finnish business angels broadly conform to the profile identified in studies of business angels in other countries. In terms of their personal characteristics active business angels in Finland are predominantly males (95%) and the majority are aged between 40 and 60 (67%). In this respect Finnish business angels are somewhat older than those identified in the USA and the UK, but similar in age to Swedish business angels (Landström, 1993) which no doubt reflects the higher tax rates in Nordic countries, meaning that it takes longer to achieve a high net worth. Finnish business angels are also well educated: 56% have a Masters degree, which is the basic university degree in Finland, and a further 8% have a Ph.D. Nearly half (48%) have backgrounds in technology and over one-third have backgrounds in commerce (38%).

Finnish business angels are extremely entrepreneurial: 95% of active business angels have participated in the founding of at least one company; the median number of companies founded by the sample is five and the median number of years of experience as an entrepreneur is 15. In addition, half have also held top management positions in large companies (median of 10 years experience). Not surprisingly, the main source of wealth of the sample of active angels is derived from these entrepreneurial efforts. Only 16% of business angels reported that their main source of wealth was inherited.

Deal Flow and Investment Activity

The sample of active business angels receive a median of six investment proposals per year, with 80% receiving fewer than 10 proposals. The most frequent source of information on investment opportunities is business contacts and friends. However, venture capital firms, although a source of information for only a minority of business angels, was rated as providing the best quality of information on investment opportunities. In the three years prior to the survey the business angels had received a total of 330 investment opportunities; 3 or 4 out of every 10 were seriously considered from which one investment was made.

Investment Characteristics

Business angels in Finland typically make relatively small investments. Three quarters of investments involved amounts of less than FM 800,000 (approx. \$175,000).⁵ By comparison, the average venture capital investment in Finland is FM 2 million. Nevertheless, larger investments do occur, and 25% of investors had, at some stage, made investments which exceeded FM 3 million (\$650,000).

Their investments are concentrated at the seed (23%), start-up (29%) and early stage (23%) of new venture development: indeed, these stages account for three-quarters of all the investments made by the sample of active business angels. Their investments are also more often in manufacturing (65%) than services (35%). About 40% of investments (62% of manufacturing investments) were in high technology sectors. Finnish investors, just like those in the USA and UK, exhibit a marked preference for investing in businesses located close to home: 60% of investments were located within 50 km of their home or office.

Just over half of all investments by Finnish business angels are syndicated, normally with other business angels (43%) but occasionally with venture capital funds (9%). Moreover, it is quite common for the business angel or syndicate not to be the only external investor in the business. A further one-quarter of businesses in which the sample of business angels had invested had raised finance independently, either before, after or at the same time, from another business angel or a venture capital fund.

In a majority of cases the investor had some kind of formal or informal link or knowledge of the company before making their investment. The most common connection was simply that the investor knew the owner or management team (43%). However, in some cases (8%) the investor had been in some form of business relationship (e.g. supplier, customer) or had been a consultant or mentor (8%). Moreover, in those 40% of cases in which the firm had been unknown to the investor in this study it is possible that a syndicate member had links with the firm.

IV. EXIT ACTIVITY

Aggregate Evidence

The sample of business angels had made a total of 49 exits. In those cases for which information on returns was supplied ($n = 40$) one-third provided a significant or modest return to their investor, and 1 in 5 provided significant financial returns (an IRR in excess of 20%), while at the other extreme just over half resulted in a partial (18%) or full (38%) loss (Table 1). This compares with Finnish venture capital companies which reported 1 in 3 of their exits in 1993 to have been profitable. Taken at face value this would suggest that business angels have a similar success rate to professional venture capital firms. This is particularly noteworthy when the different stages of investments by business angels and venture capital funds are considered. Unlike their counterparts in other European countries, Finnish venture capital funds make a high proportion of their investments in businesses at the early stage of development (EVCA, 1995). However, as noted earlier, most of the investments made by business angels are at even earlier stages. Nevertheless, it needs to be emphasised that this is a very inexact comparison because the exits by business angels have been made over a number of years whereas the venture capital exits relate to just one year.

Conventional wisdom in the venture capital industry states that "lemons ripen more quickly than plums." In other words, problem investments typically appear before the profits from successful investments can be realised through the sale of the shares. This aspect of venture capital investing is confirmed in this study as being equally relevant to the informal venture capital market. The average time to exit for successful investments (i.e. any investment from which the return was greater than break-even) was 5.09 years. In comparison, the time to exit for unsuccessful investments (i.e. exits which involved a partial or full loss of the amount invested) was just 2.82 years, which reflects the vulnerability to closure of busi-

Table 1
The Performance of Informal Investments From
Which Business Angels Had Exited

<i>Return</i>	<i>% of Exits^c</i>
Significant return ^a	20
Modest return ^b	13
Break-even	13
Partial loss	16
Total loss	38

Notes: ^a Significant return: IRR > 20%;

^b Modest return: IRR < 20%;

^c $n = 40$.

nesses in their early years after start-up (Storey, 1994, p. 93). A further contributory factor is that successful investors will not rush to harvest their investments but will patiently build value in their investee companies before seeking an exit (Bygrave & Timmons, 1992). Investors exited from those investments on which they broke even in an average of 1.80 years.

In those cases in which the shares had some value and could be sold, the most common exit routes by business angels were a sale to other shareholders in the firm and sale to a third party. Only 16% of exits were achieved through trade sales (i.e. acquisition by another company) and there were no public listings (Table 2). However, the type of exit route was related to the success of the investment. The most frequent exit routes for successful investments were trade sales and sales to a third party, whereas sale to existing shareholders was the most common exit route for loss-making investments (Table 2). Trade sales are also the most common way in which venture capital funds realise the value of their investments (Abbott and Hay, 1995).

Initial public offerings (IPOs) often produce a higher price than trade sales (although the extent of any price differential will depend on the buoyancy of the stock market for IPOs). However, this is influenced by the fact that IPOs are the "cream of the crop" whereas trade sales will include companies that are purchased by large companies for strategic purposes, and for this reason may be willing to pay a high price, as well the more moderate performing investments and also distress sales (Bygrave & Timmons, 1992; Abbott & Hay, 1995). An IPO is also only practicable for larger companies that are able to justify a significant market capitalisation. For these reasons a trade sale will be the only exit option available to business angels in most cases.

A trade sale also has two distinct advantages over an IPO and so may be favoured by many investors. First, the price is fixed whereas the returns from an IPO, which depends on the issue price, are uncertain. Second, investors will normally be able to sell all of their shares through a trade sale (indeed, the buyer may insist upon 100% control) whereas in an IPO the market may construe an investor selling all of his shares as a negative signal. Thus, an investor may only be able to realise the full value of their investment through an IPO exit over a period of time, during which time the share price may fall. Indeed, a number of recent studies note that the long-run performance of IPO shares under-perform the market (Leleux & Manigart, 1994). In the case of what venture capitalists call "the living dead", that is investments which have failed to meet expectations and are unlikely to produce a profitable exit, but nonetheless have a stable existence, the only exit route available is likely to be through a repurchase of the shares by the existing management team. Comparison between the exit routes of business angels and professional venture capital companies in Finland (Table 3) confirms that the most common exit

Table 2
Exit Routes

	<i>Return</i>					<i>No</i>	<i>Total</i>
	<i>Significant Return</i>	<i>Modest Return</i>	<i>Break- even</i>	<i>Partial Loss</i>	<i>Total Loss</i>	<i>Informa- tion</i>	
Listing on public market	—	—	—	—	—	—	—
Trade sale	4	2	2	—	—	—	8
Sale of shares to 3rd party	2	3	—	1	1	3	10
Sale of shares to other shareholders	2	—	2	4	1	3	12
Shares have no value	—	—	1	2	13	3	19
Total	8	5	5	7	15	9	49

Table 3
Exit Routes by Finnish Venture Capital Funds

<i>Exit Route</i>	<i>Number of Exits</i>	
	<i>1993</i>	<i>1994</i>
Trade sale	3	2
Sale to 3rd party	3	1
Sale to other shareholders in the company	11	11
Pay back of convertible loan	2	13
Written-off/ending of operations	7	6
Bankruptcy	9	16
Total	35	49

Source: Finnish Venture Capital Association.

route of venture capitalists is also sale to other shareholders in the company; however, a trade sale is a more common exit route for business angels.

Current Portfolio—Performance and Exit Expectations

Business angels find it difficult to estimate the performance of their current investments, particularly in comparison with their expectations at the time of investment. Nevertheless, with this caveat in mind, it is clear that investments performing below expectations exceed those performing above expectation by ratio of 1.5:1. While differences in time periods render comparisons problematic, it would nevertheless appear that the portfolios of Finnish business angels contain a slightly

Table 4
Anticipated Exit Routes for Current Portfolio

<i>Exit Route</i>	<i>% of Investments</i>
Don't know	33
Don't plan to sell	12
Business will fail	4
Sale to other shareholders	15
Sale to 3rd party	13
Trade sale	20
Public listing	4

higher proportion of investments performing below expectations than those of UK business angels. In turn, UK business angels have a higher proportion of investments performing below expectations than US business angels (Mason & Harrison, 1994; Gaston, 1989).

A significant proportion of business angels does not have a clear exit strategy (Table 4), suggesting that exit plans are often not made at the time of the investment (cf. Mason & Harrison, 1996b). In terms of their exit horizons, 52% of investors anticipated holding their investments for three to five years. However, in 12% of cases the intention is to retain the investment indefinitely. These investors might be “income-seeking angels” whose motive for investing is to generate an income stream (and perhaps also a job) rather than a capital gain (Stevenson & Coveney, 1996). A trade sale is the most common anticipated exit route (Table 4).

**V. A COMPARISON OF “SUCCESSFUL” AND
“UNSUCCESSFUL” INVESTORS**

Clearly, the investment performance of business angels has been variable. This raises a number of questions concerning the factors that influence investment performance. This section of the paper is concerned with two specific questions. First, are certain kinds of investors more successful than others? Second, are certain strategies for investing more successful than others?

In order to address these questions the 20 investors who had made exits were asked to rate the exit success of each investment that they had exited from.⁶ Investors were given a score for each exit, ranging from one point for a very successful exit to five points for an exit that resulted in a total loss.⁷ This enabled two groups of investors to be identified:

- a successful group, comprising 6 investors, with an average score of 2 or below (average success score of 1.31)

- an unsuccessful group, comprising 8 investors, with an average score of 4.54

In fact, every exit of the successful investors identified in this way had been profitable. Similarly, the unsuccessful investors identified through this procedure had not made any profitable exits. A further five investors could not be allocated to either group because their exit performance was variable, with both successful and unsuccessful exits, and insufficient information was available on the exit performance of one investor. The following analysis excludes these six investors.

The successful group had made a total of 10 exits (ranging from 1 to 3) whereas the unsuccessful group had made total of 17 exits (ranging from 1 to 6). The median number of exits for each group was the same (1.5) but the mean number of exits was higher for the unsuccessful group (2.1 cf. 1.7).

Clearly, the small number of investors prevents us from reaching definitive conclusions based on rigorous statistical analysis. However, as noted earlier, research on informal venture capital activity frequently confronts the problem of small sample sizes because of the difficulties in identifying business angels, especially in small countries. Nevertheless, in view of the importance of the topic and the total absence of any previous research on business angel exits we believe that the following analysis is not without merit and that the findings can at least be regarded as suggestive.

Personal Characteristics

Both successful and unsuccessful investors are of similar ages (average of 54 years old), have had similar levels of education (Masters degree) and have similar educational backgrounds (technical/commercial). Both groups of investors have also had similar lengths of entrepreneurial career and have founded similar numbers of businesses (means of 7.1 for successful investors and 6.8 for unsuccessful investors; medians of 6.8 and 5.5). There are also no differences in sources of wealth, with dividends from, and sale of, their own company being the most common. The only clear difference between the two groups of investors is in terms of their work experience. Successful investors have spent more time working in top management positions in large and medium-sized companies and in middle management positions, whereas unsuccessful investors have spent more time working in top management positions in small companies (Table 5).⁸

Motivations for Investing

Investors were asked to rate a series of statements on motivations on a five point scale (4 to 0, with 4 = very important reason for investing) according to their

Table 5
Work Experience of Successful and Unsuccessful Investors

	<i>Successful Investors Mean Number of Years</i>	<i>Unsuccessful Investors Mean Number of Years</i>	<i>Successful Investors Median Number of Years</i>	<i>Unsuccessful Investors Median Number of Years</i>
Large company, top management	5.5	2.1	6.5	0
Medium-sized company, top management	5.3	0.6	5.0	0
Small company, top management	4.2	15.6	3.0	12.0
Middle management in any size of company	10.2	3.9	10.0	2.0
Professional	3.7	3.4	2.5	0
Civil service, top level	0	0	0	0

importance as a motive for investing. Of the 15 statements, successful and unsuccessful investors diverged on just four (difference of more than 0.5). Successful investors gave higher average scores to two statements: “investing in an interesting company is exciting” (3.0 cf. 2.4) and “I want to use my leisure time in an interesting and beneficial way” (2.8 cf. 1.9) Unsuccessful investors also gave a higher average score to two statements: “I want to take an active role in developing a promising SME” (3.4 cf. 2.7) and “I fulfil my role in society by investing in SMEs” (2.1 cf. 1.3). The tentative conclusion that can be drawn is that successful investors are motivated to a greater extent than unsuccessful investors by the “buzz” that they get from being a business angel whereas altruism is a more important motivational consideration for unsuccessful investors.

Reasons for Rejecting an Investment Opportunity

It might have been anticipated that successful and unsuccessful investors differ in terms of the way in which they evaluate investment opportunities. However, there are no observable differences in the reasons given for rejecting investment opportunities. Issues associated with the management of the company is the key consideration for both groups of investors.

Deal Flow and Investment Activity

Successful investors receive a higher number of investment opportunities per year than unsuccessful investors (Table 6). Successful investors have also made fewer investments than unsuccessful investors and have invested smaller amounts

Table 6
Number Of Investment Opportunities and Number of Investment Made

	<i>Successful Investors</i>		<i>Unsuccessful Investors</i>	
	<i>Mean</i>	<i>Median</i>	<i>Mean</i>	<i>Median</i>
Number of investment opportunities (per year)	12.2	7.5	8.5	4.0
Number of investment made	2.8	2.5	4.5	5.5
Amount invested (million FM)	1.45	1.2	5.0	3.75

of finance (Table 6). It might be expected, purely on probability grounds, that investors who make a larger number of investments will have a lower success rate in terms of the proportion of investments that are successful. Moreover, investors are concerned with the overall success of their portfolios, anticipating that some—perhaps the majority—of their investments will lose money or break even but that they will make their returns on the small proportion of very successful investments.⁹ Nevertheless, taking into consideration the evidence on the differences in deal flow and the investments made (Table 6) suggests that successful investors have the advantage over unsuccessful investors of having a wider range of opportunities to choose from and are more discriminating in those businesses in which they invest.

Sources of Information on Investment Opportunities

Investors were asked to indicate on a four point scale (1 = regularly, 4 = never) the importance of various sources of information on deal flow. The clearest difference between successful and unsuccessful investors was that friends are a much more important source of deal flow for unsuccessful investors (1.6 cf. 2.8). Unsuccessful investors are also more likely to rely on their own active search and contacts from entrepreneurs, whereas successful investors are more likely to use newspaper and magazine articles as a source of information on investment opportunities.

Prior Relationship with Investee Companies

A striking difference between the two groups is that unsuccessful investors are much more likely than successful investors to invest in friends' businesses. Six out of eight unsuccessful investors had made investments in friends' businesses compared with only 2 out of the six successful investors, and two-thirds of investments made by unsuccessful investors (24 out of 36) were in friends' businesses compared with just over 10% (2 of 17) of investments by successful investors.

Expressed another way, successful investors are much more likely than unsuccessful business angels to make investments in businesses in which there is no friendship connection with the principals.

Post-investment Relationship

There continues to be controversy as to whether venture capitalists add value to new businesses (Sapienza, 1992). If it is accepted that business angels can add value to their investments through their hands on involvement then it might be expected that successful business angels will have greater involvement with their investee businesses. On the other hand, greater involvement may not always be cost-effective and investors must balance the costs against the benefits. Thus, successful business angels may limit their involvement in order to maximise the return on the time that they put into their investee businesses (Gorman & Sahlman, 1989). The evidence indicates that there were no differences between successful and unsuccessful investors in terms of the roles that they typically play in their investee businesses (usually board member) nor in the frequency of contact with their investee businesses (usually a few times a month) nor the amount of time that they typically spend with their investee businesses (average of 3.5 hours for successful investors and 4.0 hours for unsuccessful investors). Nevertheless, as unsuccessful investors have made more investments than successful investors, it is possible that they have overburdened themselves and have failed to economise on their involvement (Sapienza & Gupta, 1994; Fiet, 1995).

These quantitative measures clearly give no indication of the nature of the contributions made by investors to their investee companies. This issue was explored by asking investors to indicate from a list of 22 areas of potential involvement their own perception of the value of the contributions that they have made to their investee companies. Successful and unsuccessful investors diverge in terms of their perception of the value of their contributions in 12 of these areas of involvement. In each case unsuccessful investors had a higher average assessment of the value of their contribution than did successful investors. Examples of such divergences include the following¹⁰ (the average score for unsuccessful investor is given first):

- assisting in negotiations (3.3 cf. 1.7)
- introducing new customers and suppliers (3.3 cf. 1.7)
- developing new financing channels (3.1 cf. 1.3)
- assisting in competitor and industry sector analysis (2.9 cf. 1.2)

However, previous studies of the involvement of both business angels and venture capitalists in their investee companies, and their value-added contribution,

indicates that these roles tend to be the least important in adding value (MacMillan, 1989; Harrison & Mason, 1992b).

Performance of Current Investment Portfolio

Past investment success is, of course, not necessarily a guide to future performance and there is no certainty that successful investors will continue to achieve profitable exits in the future. Only four of the six successful investors had current investments. Of these investments, which totalled 13, they judged seven to be performing below expectation, two were thought to be performing as expected and only one was thought to be performing above expectations. Investors said that it was too early to tell how the other three investments were performing. This compares with the unsuccessful investor group who had a total of 17 current investments, of which they considered only six to be performing below expectations and a further six were performing above expectations. This might suggest that the investment performance of investors fluctuates over time, and that the fortunes of the two groups of investors will change in the future. However, an alternative explanation may be that the unsuccessful group of investors have too optimistic a view of the performance of their portfolio.

VI. CONCLUSION

This is the first study to have examined the exits of business angels. However, the study is based on an extremely small sample and so conclusions must inevitably be tentative. The findings are, nevertheless, valuable insofar as they provide evidence on a key aspect of informal venture capital activity where no previous information existed. Two further limitations of the study should be borne in mind. First, only one simple measure of exit success is used. A more appropriate measure would be based on actual cumulative cash flows (although it might be difficult to obtain such data from private investors). This would also allow an analysis to be made of portfolio returns which is likely to be more relevant, as the *modus operandi* of venture capital investing is that a small number of very successful investments should more than offset those which lose money or break even. Second, the evidence relates to investors not investments. While it has been possible to build up a generalised picture of the investment behaviour of successful and unsuccessful investors on the basis of their overall investment activity (either all investments or current portfolio) the implicit assumption has been that the exited investments were not atypical. Deal-specific information is required in order to make further progress in understanding the investment performance and exit activity of business angels and the characteristics of successful and unsuccessful investments.

The key findings can be grouped under two headings. The first set of findings relate to aggregate investment performance. The investors in this study achieved a positive return on only about one-third of their investments. However, about 1 in 5 of all investments were very successful, generating an IRR of over 20%. Investments by private individuals in unquoted companies can therefore be very profitable. In this sample of Finnish business angels the exit success has been similar to that for professional venture capital funds. However, this is an inexact comparison because the exits by business angels have been achieved over a number of years whereas the venture capital exits refer to a single year. The most common ways in which business angels harvest their successful investments are by means of a trade sale or sale to a third party. Where the sale of investments in “living dead” and loss-making companies is possible, they are normally sold to existing shareholders in the business.

The second set of findings relate to the identification of differences between investors in terms of their investment success. This study identified two small sub-groups of investors. One group of six investors had achieved 10 exits, all of which were successful, and another group of 8 investors who had made 17 exits, none of which were successful. A number of differences were identified between these two groups of investors.

- (a) Successful investors have spent more of their career in top management positions in large companies and in middle management posts whereas unsuccessful investors have spent longer in top management positions in small companies. However, it is unclear how previous work experience relates to investment success. Possible links are with the ability to evaluate investment opportunities or in managing the investment.
- (b) In terms of their motivations for investing, successful investors gave greater emphasis to the fun and satisfaction of being involved with entrepreneurial ventures, whereas unsuccessful investors gave greater emphasis to altruistic and social responsibility motives.
- (c) Successful investors had a larger flow of investment opportunities and made fewer investments, implying that they are more discriminating in making investments.
- (d) Unsuccessful investors were more likely to derive deal flow from friends and to invest in friends' businesses. This may be either because friendship compromises the investment decision or it could be because friendship affects the nature of the post-investment relationship, leading to less value added.
- (e) Unsuccessful investors had a higher estimation of their value-added contribution to the businesses in which they invested.

However, because of the nature of the data upon which this study is based establishing causality is problematic. We simply cannot say from the available evidence whether business angels with a successful investment performance are successful because of the superior quality of their flow of information on investment opportunities, because of their approach to investing or because of the value-added contribution that they make to their investee businesses.

In view of the critical importance of exit for venture capital investors, it is surprising that this is the first ever study to have examined the performance of informal venture capital investments and the exit routes used by business angels. Although the nature of the available data has limited the scope of the study, and the geographical context may limit the generalisability of the findings, the paper has achieved its main purpose of contributing some empirical evidence on a topic where information was previously non-existent. But clearly much remains to be discovered and so further research on issues associated with the way in which business angels harvest their investments should be a high priority. The paper therefore concludes by sketching out a research agenda.

In the case of the formal, or institutional, venture capital industry the focus of research has been on the initial public offering (IPO) market (e.g. Bygrave *et al*, 1994). However, whereas a thriving IPO market is vital to venture capital companies in determining their level of returns (Bygrave, 1994), this is likely to be of little or no relevance to business angels in view of the relatively small size of their investments and the stage of business development at which they invest. But while not excluding the question of the significance of the IPO market for business angels in any research agenda, a much more important issue concerns the need for a better understanding of the trade sale process (Relander *et al*, 1994) which, on the evidence of this study, is the dominant way in which business angels exit from their successful investments. It should also be noted that in spite of the attention that is given to IPOs a trade sale is also the single most important exit route for venture capital company investors in Europe (Relander *et al*, 1994; EVCA, 1995). A number of questions can be highlighted (Relander *et al*, 1994). First, why is the trade sale route favoured by business angels as a means of realising the value of their investments? Is it the favoured choice amongst alternatives, and if so what are the advantages, or is it the only realistic exit opportunity available? Second, how is the acquiring company identified and how is contact made? Is the identification of an acquiring company one of the value-added contributions of a business angel? Third, how is the actual timing of the sale determined? Is it planned from the outset of the investment by the business angel or is it opportunistic? And how is the price determined? Finally, what is the attitude of the entrepreneur(s) to the exit and to the exit possibilities? Do the business angel and the entrepreneur have similar objectives for an exit?

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NOTES

1. This comparison excludes investments in management buyouts.
2. This phrase was coined by the Center for Venture Research, The Whittemore School of Business, University of New Hampshire
3. Areas where our understanding of the characteristics and operation of the informal venture capital market and its role in the early stage equity financing market remains limited, and which represent fruitful lines for further enquiry, have been identified by Freear, Sohl & Wetzel (1996) in their paper to the 4th State of the Art in Entrepreneurship Research conference and also by Mason (1996).
4. See Suomi & Lumme (1994) for further details of the methodology.
5. The exchange rate at the time of writing (July 1996) was 4.66 FM = \$1.
6. This is the only information that was collected on the performance on individual investments. We are therefore unable to undertake any analysis on the characteristics of successful and unsuccessful investments.
7. The full scoring system is as follows: 1 point for a very successful exit (an IRR of more than 20%), 2 points for a moderately successful exit (an IRR of less than 20%), 3 points for an exit that broke even, 4 points for an investment that resulted in a partial loss and 5 points for an investment that produced a total loss. See Table 1 for definitions of "very" and "moderately" successful.
8. Unfortunately, the data do not enable us to distinguish between management positions in which they were employees and management positions in their own company. If the companies that were founded by successful investors were larger (medium-sized) than those founded by unsuccessful investors this would account for some of the differences in work experience, although it would not account for the greater length of time of successful investors in middle management positions or top management positions in large companies.
9. This is the venture capitalist's 2:6:2 rule: two investments will fail, six will survive but make little or no return (the "living dead") and two will be very successful (Bygrave & Timmons, 1992).
10. 5 = very significant impact, 1 = no impact; 0 = did not participate in that area.

REFERENCES

- Abbott, S., & Hay, M. (1995). *Investing for the future: New firm funding in Germany, Japan, the UK and the USA*. Pitman Publishing, London.
- Aram Research Associates Inc (1987). *Informal risk capital in the Eastern Great Lakes Region*, Washington D.C.: US Small Business Administration, Office of Advocacy
- Bygrave, W.D., & Timmons, J. (1992). *Venture capital at the crossroads*. Harvard Business School Press: Boston.
- Bygrave, W.D. (1994). IPO markets in Europe and the United States: Principle and practice. In W.D. Bygrave, M. Hay, & J.B. Peeters (Eds.), *Realising Investment Value*, pp. 12–38. Pitman Publishing, London.
- Bygrave, W.D., Hay M., & Peeters J.B. (Eds.) (1994). *Realising investment value*. Pitman Publishing, London.
- EVCA (1995). *EVCA Yearbook*, European Venture Capital Association: Zaventem, Belgium.
- Fiet, J.O. (1995). Reliance upon informants in the venture capital industry, *Journal of Business Venturing*, 10, 195–223.
- Freear, J., & Wetzel, W.E. (1990). Who bankrolls high-tech entrepreneurs? *Journal of Business Venturing*, 5, 77–89.
- Freear, J., & Wetzel, W.E. (1992). The informal venture capital market in the 1990s. In D.L. Sexton, & J.D. Kasarada (Eds.), *Entrepreneurship in the 1990s*, (pp 462–486) Boston, MA: PWS-Kent.
- Freear, J., Sohl, J.E., & Wetzel, W.E. (1995). Angels: Personal investors in the venture capital market. *Entrepreneurship and Regional Development*, 7, 85–94.
- Freear, J., Sohl, J.E., & Wetzel, W.E. (1996). The informal venture capital market: Milestones passed and the road ahead. Paper to the 4th State of the Art In Entrepreneurship Research Conference, Center for Entrepreneurial Leadership, Ewing Marion Kauffman Foundation, Kansas City, Missouri.
- Gaston, R.J. (1989). *Finding private venture capital for your firm: A complete guide*. Wiley: New York.
- Gaston, R.J., & Bell, S.E. (1986). *Informal risk capital in the sunbelt region*. US Small Business Administration, Office of Advocacy, Washington DC.
- Gaston, R.J., & Bell, S.E. (1988). *The informal supply of capital*. US Small Business Administration, Office of Advocacy, Washington DC.
- Gorman, M., & Sahlman, W. (1989). What do venture capitalists do? *Journal of Business Venturing*, 4, 231–248.
- Haar, N.E., Starr, J., & MacMillan, I.C. (1988). Informal risk capital investors: Investment patterns on the East Coast of the USA, *Journal of Business Venturing*, 3, 11–29.
- Harrison, R.T., & Mason, C.M. (1992a). International perspectives on the supply of informal venture capital. *Journal of Business Venturing*, 7, 459–475.
- Harrison, R.T., & Mason, C.M. (1992b). The roles of investors in entrepreneurial companies: A comparison of informal investors and venture capitalists. In N.C. Churchill, S. Birley, W.D. Bygrave, D.F. Muzyka, C. Wahlbin & W.E. Wetzel, Jr. (Eds), *Frontiers of entrepreneurship research 1992*, (pp 388–404), Babson Park: MA: Babson College.
- Harrison, R.T., & Mason, C.M. (1993). Finance for the growing business: The role of informal investment. *National Westminster Bank Quarterly Review*, May, 17–29.
- Harrison, R.T., & Mason, C.M. (Eds.) (1996). *Informal venture capital: Evaluating the impact of business introduction services*. Hemel Hempstead: Woodhead-Faulkner.
- Landström, H. (1992). The relationship between private individuals and small firms: An agency theory approach. *Entrepreneurship and Regional Development*, 4, 199–223.

- Landström, H. (1993). Informal risk capital in Sweden and some international comparisons, *Journal of Business Venturing*, 8, 525–540.
- Leleux, B.F., & Manigart, S. (1994). Initial public offerings: Pricing and performance. In W.D. Bygrave, M. Hay, & J.B. Peeters (Eds.), *Realising investment value*. (pp 64–81), London: Pitman Publishing.
- MacMillan, I.C., Kulow, D.M., & Khoylian, R. (1989). Venture capitalists' involvement in their investments: Extent and performance, *Journal of Business Venturing*, 4, 27–47.
- Mason, C.M. (1996). Informal venture capital: Is policy running ahead of knowledge? *International Journal of Entrepreneurial Behaviour and Research*, 2(1), 4–14.
- Mason, C.M., & Harrison, R.T. (1994). The informal venture capital market in the UK. In A. Hughes & D.J. Storey (Eds.), *Financing small firms*. (pp 64–111), London: Routledge.
- Mason, C.M., & Harrison, R.T. (1995). Informal venture capital investment activity through business introduction services: Is there still a role for public policy? In W.D. Bygrave, B.J. Bird, S. Birkley, N.C. Churchill, M. Hay, R.H. Keeley & W.E. Wetzel, Jr (Eds.), *Frontiers of Entrepreneurship Research 1995*, (pp 479–493), Babson Park, MA: Babson College.
- Mason, C.M., & Harrison, R.T. (1996a). Why business angels say no: A case study of opportunities rejected by an informal investment syndicate, *International Small Business Journal*, 14(2), 35–51.
- Mason, C.M., & Harrison, R.T. (1996b). Informal venture capital: A study of the investment process and post-investment experience, *Entrepreneurship and Regional Development*, 8, 105–126.
- Mason, C., & Rogers, A. (1996). Understanding the business angel's investment decision, *Venture Finance Working Paper No. 14*, University of Southampton: Southampton.
- Mason, C., & Rogers, A. (1997). The business angel's investment decision: An exploratory analysis. In D. Deakins, P. Jennings, & C. Mason (Eds.), *Small Firms: Entrepreneurship in the 1990s* (pp. 29–46). London, Paul Chapman Publishing.
- Relander, K-E, Syrjänen, A-P., & Miettinen, A. (1994). Analysis of the trade sale as a venture capital exit route. In W.D. Bygrave, M. Hay, & J.B. Peeters (Eds.), *Realising Investment Value*, (pp 132–162) London: Pitman Publishing.
- Riding, A., Dal Cin, P., Duxbury, L., Haines, G., & Safrata, R. (1993). *Informal Investors in Canada: the Identification of Salient Characteristics*, Carleton University: Ottawa.
- Roberts, E.B. (1990). Initial capital for the new technological enterprise, *IEEE Transactions on Engineering Management*, 17, 81–94.
- Sapienza, H.J. (1992). When do venture capitalists add value? *Journal of Business Venturing*, 7, 9–27.
- Sapienza, H.J., & Gupta, A.K. (1994). The impact of agency risks and task uncertainty on venture capitalist–CEO interaction, *Academy of Management Journal*, 37, 1618–1632.
- Short, D.M., & Riding, A.L. (1989). Informal investors in the Ottawa-Carleton region: Experiences and expectations, *Entrepreneurship and Regional Development*, 1, 99–112.
- Stevenson, H. & Coveney, P. (1996). A survey of business angels. In R. Blackburn, & P. Jennings (Eds.), *Small firms: Contributions to economic regeneration* (pp 37–48). London: Paul Chapman Publishing.
- Storey, D.J. (1994). *Understanding the small business sector*. London, Routledge.
- Suomi, M., & Lumme, A. (1994). *Yksityishenkilöt paaoma sijoittajina suomessa* (Informal private investors in Finland), SITRA: Helsinki. (with English summary).
- Tymes, E.R., & Krasner, O.J. (1983). Informal risk capital in California. In J.A. Hornaday, J.A. Timmons, & K.H. Vesper (Eds.), *Frontiers of entrepreneurship research 1983*. (pp 347–368). Babson Park, MA: Babson College.
- Wetzel, W.E. (1981). Informal risk capital in New England. In K.H. Vesper (Ed.), *Frontiers of entrepreneurship research 1981*, (pp 217–245). Babson Park, MA: Babson College.

- Wetzel, W.E. Jr. (1986). Entrepreneurs, angels and economic renaissance. In R.D. Hisrich (Ed.), *Entrepreneurship, intrapreneurship and venture capital*. (pp 119–139) Lexington, MA: Lexington Books.
- Wetzel, W.E. Jr. (1987). The informal risk capital market: Aspects of scale and efficiency, *Journal of Business Venturing*, 2, 299–313.
- Wetzel, W.E., & Seymour, C. (1981). *Informal risk capital in New England*, Washington DC. US Small Business Administration, Office of Advocacy.